UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
SHAW, YIN CHEN

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/014,486	COUSINS ET AL.
	Examiner	Art Unit
	Yin-Chen Shaw	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 January 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,5,6,8-14,17,18 and 30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,5,6,8-14,17,18 and 30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

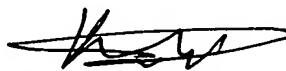8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04/08/2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1. This written action is responding to the Request for Continued Examination (RCE) dated on 01/27/2006.

2. The Drawing submitted on Apr. 08, 2002 has been approved.

3. Amendment on the Specification filed on Jan. 27, 2006 has been approved.

4. Claims 1, 5, 9, 13-14, and 17 are amended, while Claims 2, 8-12, 18, and 30 remain unchanged.

5. Claims 1-2, 5-6, 8-14, 17-18, and 30 have been examined and rejected. Claims 1-2, 5-6, 8-14, 17-18, and 30 are pending.

Drawings

6. The drawings, received on Apr. 08, 2002, have been submitted by the Applicant for substituting the drawings submitted on Dec. 14, 2001. These drawings have been approved by the Office.

Specification

7. The modification of the Specification filed on Jan. 27, 2006, has been approved by the Office since no new matter has been added to the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

8. Claims 1-2, 5-6, 8-14, 17-18, and 30 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Wang et al. (U.S. Patent 5,490,217) and

further in view of Shioda et al. (U.S. Patent 6,634,559), Mayer, Jr. et al.

(U.S. Patent 4,202,626), and Wang et al. (U.S. Patent 5,513,264).

   a. *Referring to Claim 1:*

      As per Claim 1, Wang et al. ('217) disclose an apparatus for

      creating a tamper-proof document, comprising:

      an encoder **[a machine readable image code encoder 4 (lines**

      65-66, Col. 3)] configured to digitally encode **[encode (line 18,**

      Col. 3)] a user-inputted portion **[an actual signature (line 19,**

      Col. 3)] of the document as encoded information **[documents**

      generated by the system of the present invention contain the

      machine readable image code affixed thereon (lines 49-51,

      Col. 4)];

      an access selector configured to select a level access for the

      encoded information **[An automatic document handling system**

which includes programmed general purpose computer means for processing and storing documents (line 25-28, Col. 2). Yet another embodiment of the present invention is a system which may be used to encode certain identifying information such as an actual signature, seal, finger prints, retina feature, facial picture, significant dates and the like into the machine readable image code. The encoded (an encrypted if desired) image may then be reproduced on a document such as a check, passport, etc. (lines 17-23, Col. 3 and Fig. 3); *where encryption process means that only rightful users with authorized key to decrypt the useful information and, thus, provide an access control*];

a printer configured to print [a printer (Fig. 8); *where the printer is used for printing purpose*] the tamper-proof document including the encoded information [documents generated by the system of the present invention contain the machine readable image code affixed thereon (lines 49-51, Col. 4)].

Wang et al. do not expressly disclose the remaining limitations of the claim. However, Shioda et al. disclose:

a placement selector configured to select a location on the tamper-proof document to place the encoded information [In details, the bar code 115 includes codes used by the reading device for confirming a password for the printed matter,

permitting the printed matter only to be printed, enabling only creation of a file or only fax of the file, or letting a holder of the printed matter select a process among several processes by displaying a menu. It should be noted that the bar code 115 may include information about the password (lines 59-66, Col. 6). Additionally, the bar code 115 may be printed at any location on the printed matter (lines 7-8, Col. 7). The program including the steps of recording an entire document on the first area by encoding the entire document to a code readable by the computer, and recording a reduced image of at least a part of the document on the second area for a user to preview the document (line 67, Col. 2 and lines 1-4, Col. 3); *where the bar code can be placed anywhere according to the user or printer choice through the software program application*];

a processor configured to process, responsive to said access selector, the encoded information [The above-described objects of the present invention are also achieved by a recording medium readable by a computer, tangibly embodying a program of instructions executable by the computer (lines 63-66, Col. 2). The control-amount calculating unit 300 includes a CPU (Central Processing Unit) 301 an a memory 302 (lines 43-46, Col. 24 and Fig. 22); *where the CPU is a*

processor, contained in every computing device, for

processing information based on the software program

instructions]; and

encoded information as an area of glyph marks at the location

[The image forming system 33 includes a printer 45 and a

scanner 47. The code-processing program 35 includes an

encoder 37 and a decoder 39 (lines 46-48, Col. 9). The bar

code 115 includes codes used by a reading device to perform

processes planned by a creator of the printed matter. In

details, the bar code 115 includes codes used by the reading

device for confirming a password for the printed matter,

permitting the printed matter only to be printed, enabling

only creation of a file or only fax of the file, or letting a holder

of the printed matter select a process among several

processes by displaying a menu. It should be noted that the

bar code 115 may include information about the password

(lines 57-66, Col. 6). Additionally, a two dimensional bar

code may be applied to the bar code 115. Alternatively,

codes other than a bar code may be used as the barcode 115

(lines 4-7, Col. 7). A code used in the coding part 113, is for

instance, a glyph code that is a coding format expressing

zeros and ones by use of slashes facing left and right (lines

47-49, Col. 5 and Fig. 2); *where the bar code 115 may be*

replaced with other code, such as the glyph code, for

encoding the information in a similar fashion as in

component 113 of Fig. 2].

Furthermore, Mayer, Jr. et al. disclose a lens apparatus

configured to produce a composite image of the document and

image information decoded from the encoded information **[As**

seen in FIG. 2, decrypting device 48 comprises a unitary

decrypting lens array 50, corresponding to encrypting lens

28, which is closely juxtaposed to a bank check 52. Bank

check 52 is held in place by spring-loaded clamping means

particularly described in Mayer-Dobbins '109, and not shown

herein. Bank check 52 is so juxtaposed to decrypting lens

array 50 that the encrypted image from the film in camera 12

which is reproduced at its upper right hand corner directly

confronts decrypting lens array 50 (lines 24-33, Col. 5). In

accordance with the teachings of the present invention, the

signature 72 of an authorized drawer (user) of these checks,

John D. Depositor, coincides with a representation 74 of said

account code number 69134208, i.e., account code number

representation 74 is superimposed on signature 72, or

signature 72 is superimposed on account code number

representation 74 (lines 64-68, Col. 5 and lines 1-2, Col. 6)],

and Wang et al. ('264) disclose wherein the orientation of the

image information is determined by disambiguation **[Thus, step 82 may encompass automatic analysis of the reading relationship between a scanner and a dataform using electronic image analysis, with the coupling of adjustment information to the scanner for adjustment of the reading performance characteristics (e.g. scanner magnification, alignment, orientation, focus, distance, etc.). Also step 82 may encompass automatic recognition of a dataform image of acceptable size, centering, resolution, etc. and activation of auto discriminate step 88 and decoding step 90 upon such recognition of. an acceptable dataform image (lines 21-31, Col. 9 and Fig. 2);** *where the orientation of the decoded image is obtained by performing the analysis on the scanned image through the lens (scanner) equipment]*. Wang et al. ('217), Shioda, Mayer jr. et al., and Wang et al. ('264) are analogous art because they are from similar technology relating to document encoding/decoding and printing and viewing processes. It would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the system disclosed in Wang et al. ('217) with Shioda et al. to have the choice for placing the encoded data, as a glyph code, at user's discretion, and with Mayer, Jr. et al. and Wang et al. ('264) to have the lens system that is capable to display the superimposed decoded information

by performing the image analysis since one would have been motivated (1) to provide a data sheet using only a recoding sheet such as paper as a medium, by which electronic document data can be distributed or carried with user, and the user can recognize information recorded on the recording sheet from a text or the like expressed on the recording sheet (lines 29-34, Col. 2 from Shioda et al.), (2) to perform the acts of verifying and authenticating handwritten signature of authorized users of documents such as bank checks, savings account passbooks, credit cards, identification cards, and the like (line 56-59, Col. 1 from Mayer, Jr. et al.), and (3) to automated the process by including the automatic analysis of the reading relationship between a scanner (lens) system and a dataform (lines 20-23, Col. 9 from Wang et al. ('264)). Therefore, it would have been obvious to combine Wang et al. ('217) with Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) to obtain the invention as specified in Claim 1.

b. *Referring to Claim 2:*

As per Claim 2, Wang et al. ('217), Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) disclose Claim 1. In addition, Wang et al. ('217) disclose the apparatus of claim 1, wherein the tamper-proof document is a third-party check **[i.e., bank checks 32 (as shown**

in FIG. 9) (lines 7-8, Col. 6); *where a check can be any kinds of check associated with financial institution or person]*.

c. *Referring to Claim 5:*

As per Claim 5, it is a method claim that encompasses limitations that are similar to those of the apparatus claim 1. In addition, Mayer, Jr. et al. disclose displaying a composite image of the document and image information decoded from the encoded information **[As seen in FIG. 2, decrypting device 48 comprises a unitary decrypting lens array 50, corresponding to encrypting lens 28, which is closely juxtaposed to a bank check 52. Bank check 52 is held in place by spring-loaded clamping means particularly described in Mayer-Dobbins '109, and not shown herein. Bank check 52 is so juxtaposed to decrypting lens array 50 that the encrypted image from the film in camera 12 which is reproduced at its upper right hand corner directly confronts decrypting lens array 50 (lines 24-33, Col. 5). In accordance with the teachings of the present invention, the signature 72 of an authorized drawer (user) of these checks, John D. Depositor, coincides with a representation 74 of said account code number 69134208, i.e., account code number representation 74 is superimposed on signature 72, or signature 72 is superimposed on account code number representation 74. Because signature 72 and**

account code number representation 74 are thus made coincident, in accordance with the teachings of the present invention, it will be evident to those having ordinary skill in the art that the cryptographic representation of signature card matter 70 as reproduced on said correspondingly account code numbered checks will comprise a plurality of irregularly shaped elements, a first plurality of which will represent parts of signature 72, and a second plurality of which will represent parts of account code number representation 74 (lines 64-68, Col. 5 and lines 1-2, Col. 6); *where the composite image is reproduced and shown to the user through the lens*], and Wang et al. ('264) disclose wherein the orientation of the image information is determined by disambiguation [Thus, step 82 may encompass automatic analysis of the reading relationship between a scanner and a dataform using electronic image analysis, with the coupling of adjustment information to the scanner for adjustment of the reading performance characteristics (e.g. scanner magnification, alignment, orientation, focus, distance, etc.). Also step 82 may encompass automatic recognition of a dataform image of acceptable size, centering, resolution, etc. and activation of auto discriminate step 88 and decoding step 90 upon such recognition of an acceptable dataform

image (lines 21-31, Col. 9 and Fig. 2); *where the orientation of the decoded image is obtained by performing the analysis on the scanned image through the lens (scanner) equipment*]. Thus, Claim 5 is rejected with the same rationale applied against Claim 1 above.

d. <u>*Referring to Claim 6*</u>:

As per Claim 6, it is a method claim corresponding to the apparatus claim 2. Thus, it is rejected with the same rationale applied against Claim 2 above.

e. <u>*Referring to Claim 8*</u>:

As per Claim 8, Wang et al. ('217), Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) disclose the method of claim 5. In addition, Shioda et al. disclose wherein the user-inputted portion is handwritten **[(lines 29-32, Col. 7); *where password information is hand-written*]**.

f. <u>*Referring to Claim 9*</u>:

As per Claim 9, it encompasses limitations that are similar to those of Claim 5. Wang et al. ('217) and Shioda et al. both disclose decoding the encoded information as decoded information **[[decoding the encoded information to obtain decoded information (lines 13-14, Col. 3 from Shioda et al.)]** and **[When the bearer of such document attempts to use same, the information contained in the machine readable**

**image code may be scanned, decoded (and decrypted) (lines
23-26, Col. 3 from Wang et al. ('217));** *where the process of
decoding the information will produce the decoded
information*]].

In addition, Wang et al. ('217) disclose a method for ensuring that
a document has not been altered, comprising:

comparing the decoded information with the user-inputted portion
**[When the bearer of such document attempts to use same,
the information contained in the machine readable image
code may be scanned, decoded (and decrypted) compared to
the human readable information contained on the image-
containing document (lines 26-28, Col. 3)]**; and

identifying the document as altered, if the decoded information is
not identical to the user-inputted portion **[If said document is
altered, the altered version may be re-entered into the
computer, the computer storage location of the original
version of the document being identified by the information
in said machine readable image code and then stored
information may be updated based on the content of the
altered version of the document (lines 46-52, Col. 2)]**.

g. *Referring to Claim 10:*

As per Claim 10, the rejection of Claim 9 is incorporated. In
addition, Claim 10 encompasses limitations that are similar to

those of Claim 8. Thus, it is rejected with the same rationale applied against Claim 8 above.

h. *Referring to Claim 11:*

As per Claim 11, Wang et al. ('217), Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) disclose the method of Claim 9. In addition, Wang et al. ('217) disclose the method of claim 9, wherein the decoded information is a graphical recreation of the user-inputted portion **[i.e., When the bearer of such document attempts to use same, the information contained in the machine readable image code may be scanned, decoded (and decrypted) compared to the human readable information contained on the image-containing document (lines 26-28, Col. 3)]**.

i. *Referring to Claim 12:*

As per Claim 12, Wang et al. ('217), Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) disclose the method of claim 9, wherein the decoding step. In addition Mayer, Jr. et al. disclose further comprises placing the document under a viewport of a lens apparatus, wherein the lens apparatus converts the encoded information to decoded information **[i.e., As seen in FIG. 2, decrypting device 48 comprises a unitary decrypting lens array 50, corresponding to encrypting lens 28, which is closely juxtaposed to a bank check 52. Bank check 52 is**

held in place by spring-loaded clamping means particularly described in Mayer-Dobbins '109, and not shown herein. Bank check 52 is so juxtaposed to decrypting lens array 50 that the encrypted image from the film in camera 12 which is reproduced at its upper right hand corner directly confronts decrypting lens array 50 (lines 24-33, Col. 5). As will be evident to those having ordinary skill in the art, informed by the present disclosure and Mayer-Dobbins '109, an observer looking into opening 64 in the smaller end of housing 66, through lenses 60, 62, will see the signature made by the authorized drawer (user) on the signature line of bank check 52, and will also see, through decrypting lens array 50 and lens 58, the drawer's signature as it appears on the signature card used in making the encrypted image which is reproduced on bank check 52 (lines 41-50, Col. 5)].

j.   *Referring to Claim 13:*

As per Claim 13, Wang et al. ('217), Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) disclose the method of claim 12. In addition, Mayer, Jr. et al. disclose wherein displaying the decoded information further comprises superimposing the decoded information on the document **[i.e., In accordance with the teachings of the present invention, the signature 72 of an authorized drawer (user) of these checks, John D. Depositor,**

coincides with a representation 74 of said account code number 69134208, i.e., account code number representation 74 is superimposed on signature 72, or signature 72 is superimposed on account code number representation 74 (lines 64-68, Col. 5 and lines 1-2, Col. 6). As will be evident to those having ordinary skill in the art, informed by the present disclosure and Mayer-Dobbins '109, an observer looking into opening 64 in the smaller end of housing 66, through lenses 60, 62, will see the signature made by the authorized drawer (user) on the signature line of bank check 52, and will also see, through decrypting lens array 50 and lens 58, the drawer's signature as it appears on the signature card used in making the encrypted image which is reproduced on bank check 52 (lines 41-50, Col. 5)].

k. *Referring to Claim 14:*

As per Claim 14, Wang et al. ('217), Shioda et al., Mayer, Jr. et al., and Wang et al. ('264) disclose the method of claim 12. In addition, Mayer, Jr. et al. disclose wherein displaying the decoded information further comprises disclose outside of the document [Bank check 52 is so juxtaposed to decrypting lens array 50 that the encrypted image from the film in camera 12 which is reproduced at its upper right hand corner directly confronts decrypting lens array 50. An observer looking into opening

64 in the smaller end of housing 66, through lenses 60, 62, will see the signature made by the authorized drawer (user) on the signature line of bank check 52 (lines 44-46, Col. 5); *where the decoded composite image is the one shown on the lens (outside the document)*].

l. *Referring to Claim 17:*

As per Claim 17, it encompasses limitations that are similar to those of Claim 5. In addition, Shioda et al. disclose the claimed limitation as set forth in Claim 5 in addition of a computer-readable medium containing instructions for controlling a data processing system **[a recording medium storing a program readable by the data-sheet creating device for controlling the data-sheet creating device (lines 26-28, Col. 2)]**.

m. *Referring to Claim 18:*

As per Claim 18, the rejection of Claim 17 is incorporated. In addition, Claim 18 is a computer-readable medium claim corresponding to the method claim 8. Thus, it is rejected with the same rationale applied against Claim 8 above.

n. *Referring to Claim 30:*

As per Claim 30, the rejection of Claim 17 is incorporated. In addition, Claim 30 is a computer-readable medium claim corresponding to the method claim 6. Thus, it is rejected with the same rationale applied against Claim 6 above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    a. Kaish et al. (U.S. Patent 5,974,150) disclose authentication label and reader combine to form a high security system to thwart counterfeiting in a wide range of applications. FIG. 2 shows a schematic representation of a detector suitable for use in an authentication system according to the present invention. This unit contains lens 38. The authentication certificate 1 may also include other features, such as a trademark 5, product identification 6, copyright text 7 (provided to aid in obtaining a legal remedy in the case of simply copying), MICR text 8 (to allow automated reading by means of an MICR reader of a limited amount of information), a two-dimensional bar code 9 and a glyph pattern 10. Each of the codes (MICR text 8, bar code 9 and glyph pattern 10) may include an encrypted message defining a spatial relation between the dichroic fibers 3 and a reference position 4, which is in this case a printed rectangular box.

    b. Mathisen et al. (U.S. Patent 3,796,497) disclose lens 47, such as a microscope objective, and an invention of an alignment method and system which accomplishes the rapid, repeatable and automatic positioning of objects. Each object is provided with corresponding

alignment patterns in at least two spaced apart regions. Each

pattern comprises at least two non-parallel lines which permits the

position of corresponding points on each object to be determined

by optically scanning spatially filtered images of the patterns in a

single direction to generate signals indicative of the position of the

objects. The images of wafer 21 and mask 23 are optically

superimposed (FIG. 2A) and roughly aligned.

10. Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Yin-Chen Shaw whose telephone

number is 571-272-8593. The examiner can normally be reached on 8:00

to 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Kim Yen Vu can be reached on 571-272-3859.

The fax phone number for the organization where this application or

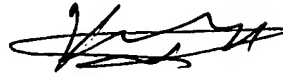proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status

information for published applications may be obtained from either Private

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system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Y.C. Shaw

Apr. 13, 2006   KAMBIZ ZAND
                                                 PRIMARY EXAMINER